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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/775,860

02/01/2001

Steven W. Keck

P125US

8416

7590

10/18/2004

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP
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EXAMINER

NGUYEN, STEVEN H D

ART UNIT

PAPER NUMBER

2665

DATE MAILED: 10/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/775,860

Applicant(s)

KECK ET AL.

Examiner

Steven HD Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 February 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 39 is objected to because of the following informalities: this claim should be depended on the claim 35. Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 4, 6-14, 18-28 and 32-42 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As claim 4, 18 and 32, "each downstream device" is vague and indefinite because it's unclear if it refers to "the downstream device" or "independent downstream devices". Please clarify so the meter and boundary of the claim can be determined.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-13, 15-27, 29-41 and 43-44 are rejected under 35 U.S.C. 102(b) as being anticipated by Robinson (USP 5544222).

Regarding claims 1, 15 and 29, Robinson discloses (Figs 1-10 and col. 1, line 10 to col. 28, line 24) a method and system for controlling the flow of data in a base transceiver station (Figs 3 or 4) comprising providing first and second upstream devices (Fig 4, Ref 44 and 44'); providing a downstream device (Fig 4, Ref 45s); and enabling simultaneous communication between the downstream device and the first and second upstream devices (Col. 18, lines 16-21).

Regarding claims 2, 16 and 30, Robinson discloses the first and second upstream devices each comprise a base transceiver station manager (Fig 4, Ref 44 and 44' and Fig 8 and col. 19, lines 22-54, Ref 803).

Regarding claims 3, 17 and 31, Robinson discloses the downstream device comprises multiple independent downstream devices (Fig 4, Ref 45s).

Regarding claims 4, 18 and 32, Robinson discloses each downstream device comprises a channel module (Fig 4, Ref 45s).

Regarding claims 5, 19 and 33, Robinson discloses the first and second base transceiver station managers include redundancy capabilities (Fig 4, Ref 44s and col. 19, line 15-21).

Regarding claims 6, 20, and 34, Robinson discloses the channel module comprises a back plane interface wherein the back plane interface is independently coupled to each base transceiver station manager (Fig 4, Ref 42).

Regarding claims 7, 21 and 35, Robinson discloses the back plane interface transmits and receives data to and from the first and second base transceiver station managers simultaneously via independent data paths (Fig 4, Ref 42).

Regarding claims 8, 22 and 36, Robinson discloses the back plane interface comprises a clock reference selection circuit and a data path multiplexor (Fig 4, Ref 42 and col. 18, lines 16-41, multiplexing the data from the ref 45s onto the bus).

Regarding claims 9, 23 and 37, Robinson discloses the clock reference selection circuit is utilized to immediately switch to the first or second base transceiver station manager upon detection of a failure of the first or second base transceiver station manager (Fig 4, Ref 42 and col. 18, lines 16-41).

Regarding claims 10, 24 and 38, Robinson discloses the back plane interface further comprises a data path de-multiplexor (Fig 4, Ref 42 and col. 18, lines 16-41, demultiplexing the data from ref 44 to the ref 45s).

Regarding claims 11, 25 and 39, Robinson discloses the data comprises a data frame structure (col. 22, lines 7-26).

Regarding claims 12, 26, 40 and 43, Robinson discloses the data frame structure comprises a frame sync portion (col. 22, lines 7-26, Flag), a provisioning information portion (col. 22, lines 7-26, address), a control portion (col. 22, lines 7-26, control) and a payload portion (col. 22, lines 7-26, information).

Regarding claims 13, 27, 41 and 44, Robinson discloses the data frame structure is in a table format (col. 22, lines 7-26).

6. Claims 1-7, 15-21 and 29-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Atkinson (USP 4694484).

Regarding claims 1-7, 15-21 and 29-36, Atkinson discloses (Figs 1-19 and col. 1, lines a method and system for controlling the flow of data in a base transceiver station (Fig 19)

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comprising providing first and second upstream devices (Fig 14, 1402, 1404 or Fig 19, BSCs) each comprise a base transceiver station manager (Fig 14, 1404 and 1408) including redundancy capabilities; providing a downstream device (Fig 14, Ref 1102-1104) comprises multiple independent downstream devices (Fig 14, Ref 1002-1104) and comprises a channel module (Fig 14, Ref 1102) comprises a back plane interface (Fig 19, col. 53-66) wherein the back plane interface is independently coupled to each base transceiver station manager (Fig 14, back plane buses is coupled to Ref 1108), transmits and receives data to and from the first and second base transceiver station managers simultaneously via independent data paths and enabling simultaneous communication between the downstream device and the first and second upstream devices (Fig 14 and col. 10, lines 12-34) and multiplexer and demultiplexer for establishing a communication between the transceivers and upstream devices (Fig 14).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 14, 28, 42 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robinson (USP 5544222).

Regarding claims 14, 28, 42 and 45, Robinson fails to disclose the table format comprises seven columns and ten rows. However, it would have been obvious to one of ordinary skill in the art at the time of invention was made to implement a data frame structure with ten rows and

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seven columns instead of one row and plurality of column. The motivation would have been to improve the throughput of the base station.

9. Claims 8-14, 22-28 and 36-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atkinson (USP 4694484) in view of Robinson (USP 5544222).

Regarding claims 8-13, 22-27, 36-41 and 43-44, Atkinson fail to fully disclose the claimed invention. However, in the same field of endeavor, Robinson discloses (Figs 1-10 and col. 1, line 10 to col. 28, line 24) a clock reference selection circuit and a data path multiplexor (Fig 4, Ref 42 and col. 18, lines 16-41, multiplexing the data from the ref 45s onto the bus); the back plane interface comprises a clock reference selection circuit and a data path multiplexor (Fig 4, Ref 42 and col. 18, lines 16-41, multiplexing the data from the ref 45s onto the bus; the clock reference selection circuit is utilized to immediately switch to the first or second base transceiver station manager upon detection of a failure of the first or second base transceiver station manager (Fig 4, Ref 42 and col. 18, lines 16-41); de-multiplexor (Fig 4, Ref 42 and col. 18, lines 16-41, demultiplexing the data from ref 44 to the ref 45s); the data comprises a data frame structure (col. 22, lines 7-26); the data frame structure comprises a frame sync portion (col. 22, lines 7-26, Flag), a provisioning information portion (col. 22, lines 7-26, address), a control portion (col. 22, lines 7-26, control) and a payload portion (col. 22, lines 7-26, information); the data frame structure is in a table format (col. 22, lines 7-26).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply a clock circuit to activate the redundant manager device as disclosed by Robinson into Atkinson's method and system. The motivation would have been to reduce the down time.

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Regarding claims 14, 28, 42 and 45, Atkinson and Robinson fail to disclose the table format comprises seven columns and ten rows. However, it would have been obvious to one of ordinary skill in the art at the time of invention was made to implement a data frame structure with ten rows and seven columns instead of one row and plurality of column. The motivation would have been to improve the throughput of the base station.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Fletcher (USP 4777633) discloses a method and system for bi-directional communication between the MUXs and modems.

Tanishima (USP 6175747) discloses a base transceiver station.

Robinson (USP 6122527) discloses a base transceiver station comprising plurality of modem and computer boards for coupling to a back plane wherein the computer boards have redundant capability.

Weber (USP 5621753) discloses a base transceiver station.

Kingdon (USP 6256505) discloses a base transceiver station.

Matsumoto (USP 5898683) discloses a base transceiver station.

Doviak (USP 6198920) discloses a base transceiver station comprising plurality of modem and computer boards wherein the computer boards have redundant capability.

Menich (USP 4730187) discloses cell site controller interface.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven HD Nguyen whose telephone number is (571) 272-3159. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy D Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Steven HD Nguyen
Primary Examiner
Art Unit 2665
10/13/04